

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of : Docket No. HSJ920030181US1  
S. Duan et al. : Group Art Unit: not yet assigned  
Serial No.: not yet assigned : Examiner: not yet assigned  
Filed: Herewith  
For: METHOD OF DETECTING POLARITY REVERSAL IN A MAGNETORESISTIVE  
SENSOR

INFORMATION DISCLOSURE STATEMENT  
WITHIN THREE MONTHS OF FILING OR  
BEFORE MAILING OF FIRST OFFICE ACTION  
(37 CFR 1.97(b))

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

Pursuant to Section 707.05(b) of the MPEP and 37 CFR 1.97 and 1.98, a copy is herewith submitted (attached to form PTO-1449, Rev. 7-80) of documents which may be relevant to the invention as claimed in the above-identified application.

It is requested that the Examiner fully consider the documents cited, initial the leftmost column of the attached PTO Form 1449 adjacent each cited document, and return a copy of the Form 1449 for applicants' records. It is further requested that the documents be cited on the cover of any patent issuing from the subject application.

The citation of the above documents should not be construed as a representation that an exhaustive search has been made, or that other, more pertinent information is not available. Nor does this statement constitute an admission by applicant or applicants' attorney that the information provided herein is necessarily relevant information to applicants' invention. Moreover, applicants reserve the right to establish the patentability of the claimed invention over any of the listed documents should they be applied there-against as references.

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or before the mailing date of a first Office Action on the merits, whichever occurs last. 37 CFR 1.97(b).

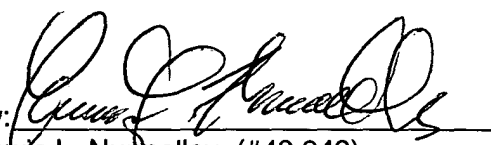
CERTIFICATE OF MAILING

Respectfully submitted,

I hereby certify that the above paper/fee is  
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Patents, Washington, D.C. 20231 on  
August 1, 2003

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: Atty. Docket No. : Serial No.  
: HSJ920030181US1: not yet assigned  
: Applicant(s)  
: S. Duan et al.  
: File Date : Group  
: Herewith : not yet assigned

LIST OF PRIOR ART CITED BY APPLICANT(S)  
(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAM.:	: DOCUMENT			CLASS/	FILING
INTL.:	: NUMBER	DATE	NAME	SUBCLASS	DATE
:AA:	2003/0038626A1	02/27/03	C. Carrington et al.	324/210	08/23/01
:AB:	6,519,108B2	02/11/03	H.A. Au et al.	360/77.04	12/01/99
:AC:	6,489,762B2	12/03/02	G. Wang et al.	324/210	04/26/01
:AD:	2002/0113587A1	08/22/02	J. Kim	324/210	02/12/02
:AE:	6,400,519B2	06/04/02	N. Mukoyama	360/31	01/31/01
:AF:	6,373,647B1	04/16/02	B.R. Baker	360/25	11/12/99
:AG:	2003/0030934A1	02/13/03	M.D. Schaff	360/66	01/24/02
:AH:	2002/0063984A1	05/30/02	B.A. McClellan	360/46	10/29/01
:AI:	6,295,175B1	09/25/01	I. Tomita et al.	360/31	12/22/98
:AJ:	6,249,392B1	06/19/01	A. H. Sacks et al.	360/31	05/13/98
:AK:	6,081,114	06/27/00	K. Shimazawa et al.	324/210	02/17/98
:AL:	5,998,993	12/07/99	K. Inage et al.	324/210	03/06/98
:AM:	5,640,089	06/17/97	J. Horikawa et al.	324/212	09/11/95

FOREIGN DOCUMENTS

: DOC. NO.	: DATE	: COUNTRY	: CLASS/	:TRANSLATION
:	:	:	SUBCLASS	YES : NO
:BA: JP92002025024	01/25/02	Japan	G11B5/455	X
:BB: JP92001006133	01/12/01	Japan	G11B5/455	X
:BC: JP6309636	11/04/94	Japan	G11B5/455	X
:BD: JP2080975	03/22/90	Japan	G01R31/00	X

OTHER PRIOR ART (INCLUD. AUTHOR, TITLE, DATE, PERTINENT PG., ETC.)

:CA: A. Wallash, "New Early Failure Phenomenon in Electrostatic Discharge Damaged Giant Magnetoresistive Recording Heads", Journal of Applied Physics, Vol. 93, No. 10, May 15, 2003, pp. 7319-7321

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).